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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,690	09/15/2003	Ricardo Martinez Perez	CE11310JI210 9640/134 9783	
30016	7590 11/17/2006		EXAMINER	
CARDINAL LAW GROUP, LLC SUITE 2000 1603 ORRINGTON AVENUE			CHAVIS, JOHN Q	
			ART UNIT	PAPER NUMBER
EVANSTON	N, IL 60201	•	2193	
			DATE MAILED: 11/17/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/662,690	PEREZ, RICARDO MARTINEZ				
Office Action Summary	Examiner	Art Unit				
	John Chavis	2193				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period was provided to the second of the second of the second of the second of the maximum statutory period was provided by the office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on <u>15 September 2003</u> .						
,-						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	·					
4) Claim(s) 1-32 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed. 6) Claim(s) <u>1-32</u> is/are rejected.						
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examine	er.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119	•					
 12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority document 	s have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
See the attached detailed Office action for a list	·					
Attachment(s)		(DTO 442)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date.						
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal 6) Other:	Patent Application				

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Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Loen et al. (6,684,393).

What is claimed is:

1. A method of allocating memory in a wireless communication system, comprising:

loading an application into a wireless communication device;

compiling at least a portion of the application into native instructions;

determining a runtime sensitivity of the native instructions; determining availability of internal memory; and

Loen et al.

See the title and the abstract and col. 4 lines 66-col. 5 line 5.

See col. 3 lines 55-60.

See col. 5 lines 26-45.

The applicant defines runtime sensitivity as the ability to execute application instructions in a timely manner in sect.

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inserting at least a portion of the native instructions into the internal memory at runtime based on the determined availability of internal memory and the runtime sensitivity determination.

- 2. The method of claim 1 wherein the application comprises a Java application with at least one Java class, each Java class including at least one bytecode.
- 3. The method of claim 1 wherein compiling at least a portion of the application into native instructions comprises passing the application through a just-in-time compiler, the just-in-time compiler adapted to detect runtime sensitivity of the native instructions.
- 4. The method of claim 1 wherein the compiled application comprises a combination of bytecodes and native instructions.
- 5. The method of claim 1 wherein determining the runtime sensitivity comprises detecting a memory attribute code. needed.
- 6. The method of claim 1 wherein determining the runtime sensitivity

0019 of his specifications. Loen's checking available memory and optimizing its use, col. 2 lines 32-45, is considered to provide for the claimed feature. Loen also determines the availability of memory to enable reuse, see col. 3 lines 10-32.

See col. 5 lines 37-45, col. 8 lines 36-51 and Loen's claim 6.

See Loen's claim 8 and col. 5 lines 46-55.

See col. 5 lines 56-65.

See col. 7 lines 12-24, which indicates that various levels of optimizations are available and therefore a mixture of code.

This feature is inherent in Loen's system to enable reuse of the proper memory space, see col. 3 lines 55-60, and to Determine how much memory is

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comprises analyzing a bytecode for memory addressing requirements and marking the analyzed bytecodes when the memory addressing requirements are extensive.

- 7. The method of claim 1 wherein inserting the native instructions into the internal memory comprises copying a set of instructions associated with the application from a flash memory to an internal random-access memory.
- 8. The method of claim 1 wherein the internal memory comprises an internal random-access cache memory.
- 9. The method of claim 1 further comprising: adding de-referencing code to the compiled application, wherein the de-referencing code allows an application loader to insert a portion of the compiled application into the available internal memory prior to executing the application.
- 10. The method of claim 1 further comprising: constructing a dereferencing table; and attaching the de-referencing table to the compiled application, wherein the de-referencing table includes memory location information and memory size information associated with the portion of the native instructions to be inserted into the internal memory prior to executing the application.
- 11. The method of claim 1 further comprising: updating a pseudo-

See col. 4 lines 57-65. Also, in reference to the flash Loen utilizes a removable media (item 58 of fig.1), which is sufficient to read on a flash drive.

See again the optimizing feature of claim 4.

See figs. 2a and 2b and Loen's claim 12.

This is considered the feature that enables optimizations and reuse.

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cache table, the pseudo-cache table including memory location information and memory size information associated with the portion of the native instructions inserted into the internal memory.

- 12. The method of claim 1 further comprising: executing the compiled application.
- 13. The method of claim 1 further comprising: relinquishing the internal memory having the inserted native instructions when the compiled application has been executed.
- 14. The method of claim 1 further comprising: updating a pseudo-cache location indicator, the pseudo-cache location indicator including an address of an available pseudo cache allocated to the inserting of the native instructions at runtime.
- 15. The method of claim 1 further comprising: updating a pseudo-cache size indicator, the pseudo-cache size indicator including a number of bytes available in a pseudo cache.

See Loen's claim 16.

See the rejection of claim 11.

See the rejection of claim 10.

Claims 16 and 25 are rejected as claim 1 above.

In reference to claims 17-18 and 26, see the rejection of claim 3.

As per claims 19 and 27, see the rejection of claim 10.

The features of claims 20 and 28 are taught via claim 11.

Claims 21 and 29 are rejected as claim 12 above.

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In reference to claims 22 and 30, see the rejection of claim 13.

As per claims 23 and 31, see the rejection of claim 14.

The features of claims 24 and 32 are taught via claim 15.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Chavis whose telephone number is (571) 272-3720. The examiner can normally be reached on M-F, 9:00am-5:30pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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John Chavis

Primary Examiner AU-2193